8K/240 Hz Full-resolution High-speed Camera and Slow-motion Instant Replay Server

Outline

We have developed an 8K/240 Hz full-resolution high-speed camera and slow-motion instant replay server for live sports broadcasts. The high-speed camera can acquire 8K/240 Hz full-resolution video through three 5/4-inch 33-megapixel image sensors. The slow-motion server can simultaneously record up to 240 min of an 8K/240 Hz video and play back an 8K/60 Hz slow-motion video. The 8K/240 Hz video signal from the camera to the slow-motion server is transmitted via two channels of an ultrahigh-definition signal/data interface (U-SDI) standardized in ITU-R BT.2077.

Features

- 8K/240 Hz full-resolution camera with three 33-megapixel CMOS image sensors.
- Slow-motion server can simultaneously record up to 240 min of an 8K/240 Hz video and play back an 8K/60 Hz slow-motion video.
- The 8K/240 Hz RGB 4:4:4 video from the camera to the slow-motion server is transmitted via two U-SDIs.

In the works

We will capture various sport images using this high-speed camera and slow-motion server. Moreover, we will continue to develop the camera and server to increase the frame frequency and operability.